

Patent Claims

1. An assembly arrangement for an air conditioning unit, in particular for a motor vehicle, having at least one housing (3), at least one first apparatus (2) for the exchange of heat, at least one second apparatus (6) for the exchange of heat, at least one inlet (5) for an in particular gaseous medium, at least one outlet (19) for the in particular gaseous medium and at least one flow control device (15), characterized in that the housing has at least one receiving device (21) for at least one further modular device (25, 31).

2. The assembly arrangement as claimed in claim 1, characterized in that the at least one further modular device (25, 31) has at least one device which influences the medium.

3. An assembly arrangement, in particular the assembly arrangement as claimed in at least one of the preceding claims, characterized in that the device which influences the medium is selected from a group of devices which influence the medium comprising apparatuses for the exchange of heat and/or flow control devices and/or flow guiding devices and/or outlets.

4. An assembly arrangement, in particular the assembly arrangement as claimed in at least one of the preceding claims, characterized in that the first apparatus (2) for the exchange of heat is an evaporator.

5. An assembly arrangement, in particular the assembly arrangement as claimed in at least one of the preceding claims, characterized in that the second apparatus (6) for the exchange of heat is a heating apparatus.

6. An assembly arrangement, in particular the assembly arrangement as claimed in at least one of the preceding claims, characterized in that there is at least one third apparatus (7) for the exchange of heat, the third apparatus for the exchange of heat being selected from a group of apparatuses which includes electrical heating elements, fuel-operated heating elements and the like.
7. An assembly arrangement, in particular the assembly arrangement as claimed in at least one of the preceding claims, characterized in that there is at least one flow control device (15) in each outlet (19).
8. An assembly arrangement, in particular the assembly arrangement as claimed in at least one of the preceding claims, characterized in that at least one flow control device (15) is arranged upstream of the second apparatus (6) for the exchange of heat, as seen in the direction of flow of the air.
9. An assembly arrangement, in particular the assembly arrangement as claimed in at least one of the preceding claims, characterized in that the second apparatus (6) and the third apparatus (7) for the exchange of heat are arranged adjacent to one another.
10. An assembly arrangement, in particular the assembly arrangement as claimed in at least one of the preceding claims, characterized in that the second apparatus (6) and the third apparatus (7) for the exchange of heat are arranged parallel to one another.
11. An assembly arrangement, in particular the assembly arrangement as claimed in at least one of the preceding claims, characterized in that the housing (3) has at least one flow guide, by which the gaseous medium is at least partially made to bypass at least

the second apparatus for the exchange of heat.

12. An assembly arrangement, in particular the assembly arrangement as claimed in at least one of the preceding claims, characterized in that at least one apparatus for the exchange of heat has at least two flow paths (61, 62 63), which are separate from one another at least in sections, for a refrigerant.

13. An assembly arrangement, in particular the assembly arrangement as claimed in at least one of the preceding claims, characterized in that at least one apparatus for the exchange of heat has at least two feeds (60, 71, 72) for a refrigerant.

14. An assembly arrangement, in particular the assembly arrangement as claimed in at least one of the preceding claims, characterized in that the refrigerant is discharged from the at least two flow paths, which are separate from one another at least in sections, via a common discharge line (65).

15. An assembly arrangement, in particular the assembly arrangement as claimed in at least one of the preceding claims, characterized in that a control device which controls the flow of the refrigerant through the apparatus for the exchange of heat is provided in at least one feed or discharge line for the refrigerant.

16. An assembly arrangement, in particular the assembly arrangement as claimed in at least one of the preceding claims, characterized in that the at least two flow paths for the refrigerant, within the apparatus for the exchange of heat, are arranged in different spatial sections of the apparatus for the exchange of heat.

17. An air conditioning unit, in particular for a vehicle, which has at least one assembly arrangement as claimed in at least one of the preceding claims.